



**JUST TRANSITION -
IFs and BUTs
The Indian Coal Mining Context**

Dr. EVR

WHAT IS JUST TRANSITION ?

- The term **just transition** is on everybody's lips. But what does it mean? There have been many transitions over the decades, from automatization, to relocation of entire industries, leading to job gains in one region and job losses in another. There have always been winners and losers in transitions.
- Just Transition is a framework developed by the trade union movement to encompass a range of social interventions needed to secure workers' rights and livelihoods when economies are shifting to sustainable production, primarily combating climate change.
- Just transition can enable decent work opportunities and social support systems for the fossil fuel industry workers and to improve the socio-economic & environmental conditions of the fossil fuel mining regions.

WHAT IS JUST TRANSITION ?

- A just transition of the energy sector means ensuring costs and benefits of a world powered with renewables are fairly distributed. It “must create alternatives to people and regions trapped in fossil fuel dynamics through new economic opportunity, education and skills trainings and adequate social safety systems.”
- A just transition is a concept, guided by principles of sustainability and climate justice. It should leave no one behind. Decisions made should benefit the most underprivileged appropriately. By doing so, benefits and burdens of the transition are equally distributed according to social equity.
- For a just transition to be just, fair and inclusive, political decision makers are required to provide the necessary framework in terms of policies, incentives as well as securities to guarantee continuity and sustainability.
- This concept of just transition was included in the preamble of the COP-21 Paris Agreement in 2015.

TRANSITIONS THAT NEED TO BE JUST

- Energy Transition – Carbon to Renewables
- Livelihood Transition of the Employees
- Societal Transition – Marginalization to 'Well to do'
- Economic Transition – Fossil fuel driven to Green Economy
- Environmental/ Ecological Transition – Degradation to Restoration
- Mine closure Transition – Active mining to Mine reclamation

GOALS OF JUST TRANSITION

- Job Security - creation of decent work and quality jobs
- Caring for the Environment and Mine closure
- Net zero world
- Climate safety

GUIDING PRINCIPLES OF JUST TRANSITION

- Just transition is about more than just the climate
- Just transition is a class and gender issue; is an anti-racist framework; it is about democracy and equity
- Adequate, informed and continual consultation on the goal and pathways should take place with all relevant stakeholders
- Policies and programmes need to take into account the strong gender dimension of many environmental challenges and opportunities, in order to promote equitable outcomes
- Policies need to provide an enabling environment for enterprises, workers, investors and consumers to drive the transition towards environmentally sustainable and inclusive economies and societies

GUIDING PRINCIPLES OF JUST TRANSITION

- Policies need to provide a just transition framework for all to promote the creation of more decent jobs, including adequate and sustainable social protection for job losses and displacement
- Policies and programmes need to be designed in line with the specific conditions of types and sizes of enterprises
- Integrate provisions for a just transition into national plans and policies
- Promote close collaboration between relevant national ministries, including ministries of economic planning and finance
- Formulate a holistic skills development policy to promote skills for green jobs, training and capacity building

- (a) Encouraging social dialogue among all stakeholders;
- (b) Developing skills and retraining for green jobs;
- (c) Developing green enterprises;
- (d) Promoting active labour policies;
- (e) Providing social protection;
- (f) Minimizing hardship for workers;
- (g) Introducing appropriate public policies to address the needs of workers;
- (h) Consulting with all stakeholders to develop mechanisms for just transition;
- (i) Ensuring a country-driven process

A Just transition model must include

- Income support for workers during the full duration of transition
- Local economic development tools for affected communities
- Realistic training/retraining programs that lead to decent work
- Knowledge sharing - adoption of best practices from other jurisdictions
- A framework to support labour standards + collective bargaining
- A sectoral approach customized to regions and work processes
- Research and development to provide support for technological adjustment
- An equity lens to understand the impacts on racialized and indigenous communities

ENABLERS OF JUST TRANSITION

- INDC commitments by countries
- Environmental degradation due to fossil fuels production
- High economic costs of coal transportation, imports and ash handling
- Cost of renewable electricity - continues to drop in India with 2.55 INR / kWh.
- Thermal power generation plant load factors (PLF) - peaked at 80% in 2008-09 and dropped to 61% in 2017-18, due to the high cost of imported coal.
- Increased competition from renewables
- Payment challenges by electricity distribution companies
- Investment in thermal power plants have reduced by 80% between 2016-20 relative to 2010-15.
- Stranded assets and reluctance of finance institutions to fund new coal business
- Increased financing for the cause of Just transition
- Large amounts of DMF funds, if gainfully utilised

DISABLERS OF JUST TRANSITION

- Huge employee force in mining, power and allied industries
- The Indian coal mining sector generates a large employment multiplier. Every formal coal job generates anywhere between 3-10 additional jobs in the coal-mining districts
- Subsidies by Government in Mining and Railway sectors
- Reliable access to electricity
- Unreliable and variability of Renewables and their storage issues
- Not so uniform Geographic distribution of energy sources
- Lack of sufficient Grid infrastructure to link renewable energy to existing grid and uniform grid integration across states
- Phase-out of coal will have significant socio-economic impacts in coal states through lost revenue
- Large amounts of DMF funds incentivize mining
- Relatively young Power plants and plan to add more new power plants
- Vested interests – political, business, criminal nexus, that encourage status quo

OPPORTUNITIES OF JUST TRANSITION

- Potential to create additional decent jobs through investments in Renewable Energy
- Improvements in job quality and incomes on a large scale from green processes
- Greener products and services in sectors like agriculture, construction, recycling and tourism
- Social inclusion, including women and marginalized, through access to affordable, environmentally sustainable energy and payments for environmental services

CHALLENGES OF JUST TRANSITION

- Economic restructuring, resulting in the displacement of workers and job losses
- Economic restructuring, resulting in Job creation due to green enterprises
- Need for enterprises, workplaces and communities to adapt to climate change
- Loss of assets and livelihoods and involuntary migration
- Adverse effects on incomes of poor households from higher energy and commodity prices
- Geographic clustering of jobs lost in the coal mining sector across India's coal belt in the east, while those gained in the renewable energy sector are likely to be concentrated in the south and west of the country

The Indian Coal Mining context

- Just transitions for India are not solely about decarbonization and the associated impacts on workers and communities. Rather, they are also about the extension of modern energy services to those who lack them and building of resilience within communities vulnerable to climate change.
- The country's substantial and sustained economic growth has been built upon a significant expansion of both its energy supply and energy demand. Expansion of access to affordable energy has been a prerequisite for increasing employment and reducing poverty.
- At the local level, the communities who rely on coal value chains for their survival are often the most susceptible to the impacts of coal mining on air quality, land, forests, water, and agriculture.

The Indian Coal Mining context

- India's per capita CO₂ emissions (1.7 tons) are below half the international average (4.4 tons) and its historical CO₂ emissions are also far below the figures of most developed countries. India is currently the third-largest emitter of CO₂ at the global level, due to its very large population and growing demands for energy to drive economic development. Furthermore, India, particularly its impoverished population, is also extremely vulnerable to climate change impacts.
- While it is likely that both coal-fired power stations and renewable energy sources will contribute to the provision of power until at least 2050, there is a need to accelerate the phase-out of coal, given the gravity of climate change, in a way that is economically viable, globally responsible, nationally beneficial, and locally fair.

Coal or Renewables - The contradiction

- India's target for coal production for 2024 is 1.0 billion tonnes.
- India is a Developing Country. Shutting coal based energy will expose India to increasing imports of renewable technology equipment and dependence on external sources.
- Is immediate Transition to RE possible? With India on course for a 285% increase in electricity generation by 2050, traditional energy sources will prove crucial.
- Privatisation of coal mining and recent coal blocks auctions have given a meaningful thrust to achieving 1 BT.
- These convey contradictory signals and raise the questions. Are India's INDC commitments feasible? Are the targets achievable, even desirable? Is there a contradiction between the two?
- We need to make a wise assessment of constraints mixing ambition with feasibility and look at a more realistic pathway.

Issues of Transition from coal to renewables

- Whenever a power plant or a coal mine shuts down, jobs are lost and workers, their families, and entire communities suffer.
- What about transition of people who depend on Coal???
- Barriers to transition are economic & political rather than technological.
- Livelihood impacts: One million people depend directly or indirectly on coal power. Income from coal royalties constitutes 50 % of total earnings of significant coal-producing states like Jharkhand and Odisha.
- Stranded assets: India added 151 GW of new coal power, valued at \$100 billion. Coal reserves are also likely to be stranded.
- Just transition is already happening in the in Indian Coal mining sector by way of reduction of employee force and closure of underground mines.

What would be the Post-closure scenario

- Environmental degradation, land-use changes and loss of land capability
- Incomplete post-closure reclamation and restoration
- Illegal mining would continue – can't stop
- Livelihood issues
- Social disorder
- Demographic changes – migration, income, literacy etc
- Renewables and Technology may not come to the mining areas
- Rights on post-closure land need to be addressed

Who are impacted Post-closure

- Industry as a whole – mining, power, railway, education etc.
- Governments – no royalties, DMF, taxes and other revenues, imports, extra financial burden, loss of CSR spending
- Formal Coal sector employees – their service providers
- Informal Coal sector employees - their service providers
- Illegal miners, Mafia – supply chain
- Service providers – administrative, industrial, commercial, trade, transporters, bankers, contractors, domestic
- Consumers – small to big and their supply chains, domestic
- Pensioners

WAY FORWARD

- A global transition towards a low-carbon and sustainable economy has both positive and negative impacts on employment. But delaying the transition is not an option: unless urgent mitigation and adaptation measures are taken, climate disruptions will cause significant job losses and tougher working conditions.
- The transition towards inclusive green economies must be fair, maximizing opportunities for economic prosperity, social justice, rights and social protection for all, leaving no one behind.
- The aim should be to generate decent jobs all along the supply chain, in dynamic, high value added sectors which stimulate the upgrading of jobs and skills, as well as job creation and improved productivity in more labour-intensive industries that offer employment opportunities on a wide scale.

WAY FORWARD

- Skills development is the key for successful transition of the workforce and creation of decent jobs, especially in certain sectors such as energy, building and transport. The establishment of higher education institutions and technology centres lays the foundations of a knowledge-based economy as an alternative to a coal- and steel-centred economy.
- Just transition for coal workers in India must focus to develop rural industries that create new jobs rather than just replacing those livelihoods lost in the coal mining sector.
- Repurposing subsidies and aggressively supporting renewable energy capacity expansion could double the number of full-time employees in India's energy sector, reaching 2.3 million full-time jobs by 2030
- Pursuing an RE job creation strategy will require analysis of skills transferability and worker mobility, among other factors.

WAY FORWARD

- With coal's accelerated decline, public investment should shift away from coal and toward renewable and new industries with potential for value addition and economic diversification.
- Possible measures include worker training programs, improved access to finance, and enhanced market access. These measures would benefit from further research in coal-belt states, includes detailed skills mapping and analysis of state-specific industrial and services sector development opportunities.
- State Governments in coal-dependent states should prepare and fund transition plans. The transition plans should include concrete measures for social security, job creation, and economic development. If DMF revenue is used to promote infrastructure development and livelihood promotion, it can facilitate the transition away from dependence on coal mines.

WAY FORWARD

- Reduce subsidies for electricity, coal, and oil & gas. Dismantling subsidy programs for electricity consumption (e.g., heavily subsidized agricultural loads), coal, and oil & gas can release the funds needed to effect a just transition in India's coal-dependent states.
- PSUs, including Coal India and its subsidiaries, should adopt a new strategic role focused on job creation to promote an orderly transition. They should play a central role in implementing a just transition by investing in economic diversification and supporting job creation through MSMEs.
- Embrace a regional hub strategy to enable job creation and regional economic development in coal-dependent states.
- State Governments should initially offer basic income support to households and communities who lose jobs during the transition.

What is the Way Forward

- Need-based transition – People's needs will meet the Justice in Just transition
- Planning and Phasing – Road map for Just transition; induce awareness about Just transition into stake-holders; Closure of Coal mining operations by PSUs followed by execution of post closure reclamation; closure by local community followed by final restoration; prioritizing hot spots
- Execute pilot projects on present abandoned mines - monitor
- Funding post-closure and Just transition: DMF, Coal Royalty, Coal Cess, Escrow, International assistance (UNFCCC)
- Sustainability & inclusiveness – explore resilience in the coal mining areas and its people
- Monitoring and Accountability
- Political will, execution and enforcement are the final say

THANK YOU

